3-month summary

- A hot summer is slightly more likely than normal
- A near-average summer remains more likely however
- Greater than normal chance of impacts from hot weather such as heatwaves
- The chances of either a dry or wet summer are similar to normal

3-month likelihood of impact

Temperature

5%	65%	30%
chance the season will be COOL	chance the season will be NEAR AVERAGE	chance the season will be HOT
0.3× ▼ the normal chance	1.1× ▲ the normal chance	1.5× ▲ the normal chance

Precipitation

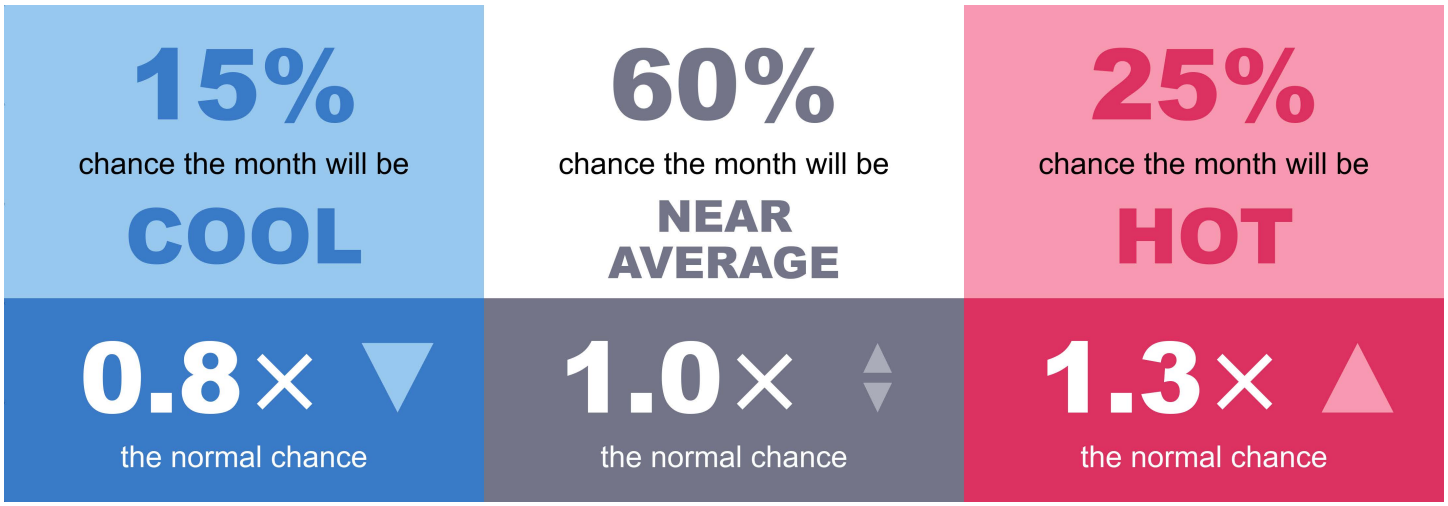
20%	55%	25%
chance the season will be DRY	chance the season will be NEAR AVERAGE	chance the season will be WET
1.0× ▲▼ the normal chance	0.9× ▼ the normal chance	1.3× ▲ the normal chance

1-month summary

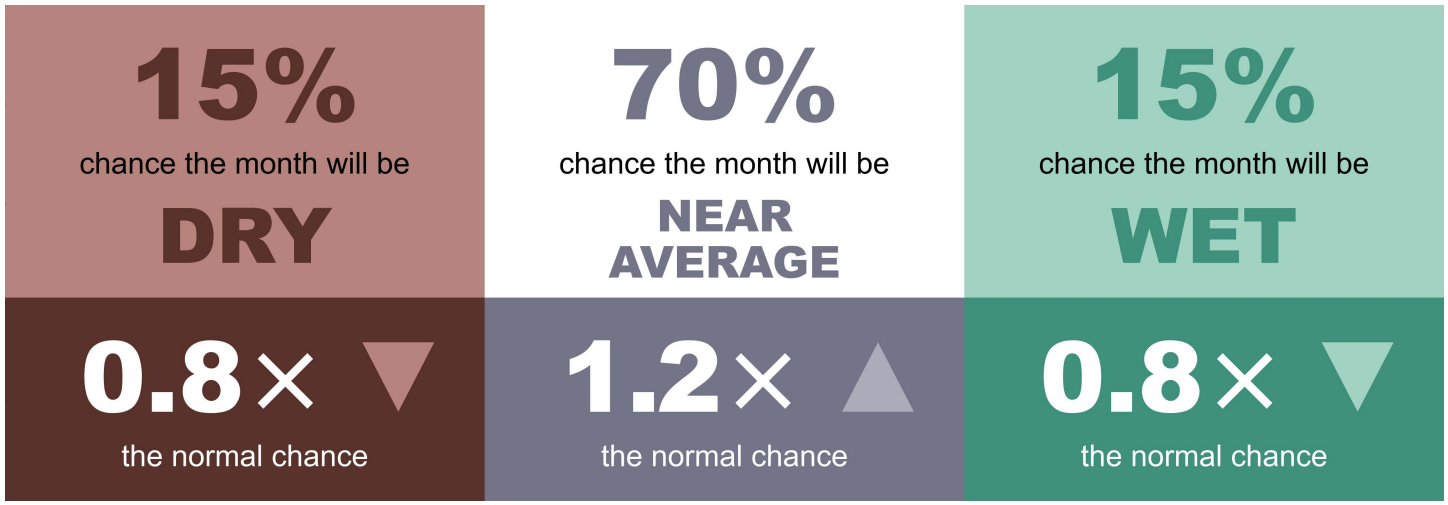
- A hot June is slightly more likely than a cool one
- However, cool spells are possible at times, especially early in the month
- The chances of both wet and dry conditions are broadly similar to normal
- Near-average rainfall is the most likely outcome

1-month likelihood of impact

Temperature



Precipitation



Understanding the Outlook

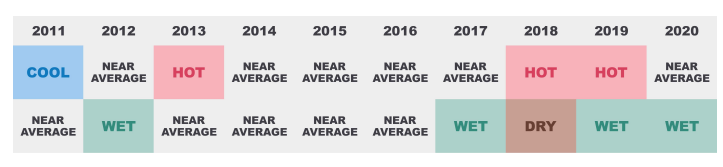
The Outlook uses 3 categories for possible UK temperature and precipitation in the next 1 and 3 months:

COOL, NEAR AVERAGE and HOT for temperature
WET, NEAR AVERAGE and DRY for precipitation

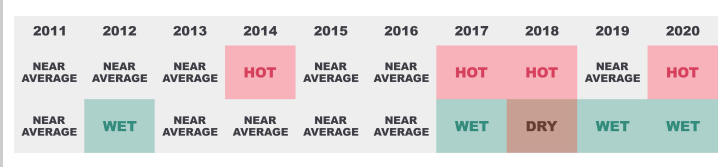
These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years


2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
COOL NEAR AVERAGE HOT NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE HOT HOT NEAR AVERAGE
NEAR AVERAGE WET NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE WET DRY WET WET

Same 1-month period over the last 10 years


2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE HOT NEAR AVERAGE NEAR AVERAGE HOT HOT NEAR AVERAGE HOT
NEAR AVERAGE WET NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE WET DRY WET WET

Outlook in context

Drivers of UK weather for June to August

Global weather patterns can affect UK weather in the coming season and their influence acts to shift the chances of the categories in the Outlook. During the summer, however, the influence of global weather patterns tends to decrease. Drivers relevant to the current Outlook are:

• Sea-surface temperatures in the vicinity of the UK are below-average, increasing the chances of colder conditions in June.

The lack of any other drivers is consistent with the relatively small shifts seen in the chances of categories in the Outlook.

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. Currently, latest signals from these centres are weak, lowering confidence in the more probable weather conditions through this period. There is, however, a small and consistent signal for high pressure to be close to the UK during summer, with this signal strongest in June.

Impact

Minimal influence from global drivers, and small signals in seasonal prediction systems, result in little shift in the likelihood of specific weather patterns during the coming summer and the likelihood of either a wet or dry summer is similar to normal.
A moderately increased chance of hot conditions through this period is consistent with our warming climate. This raises the potential for heatwaves and other hot weather impacts, although this likelihood is less than in recent years.

Outlook compared to normal likelihood

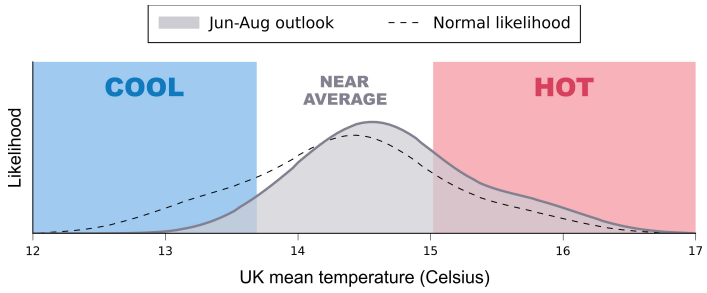
The curves below show the likelihood of the 1- and 3-month average temperature and precipitation taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature or precipitation at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

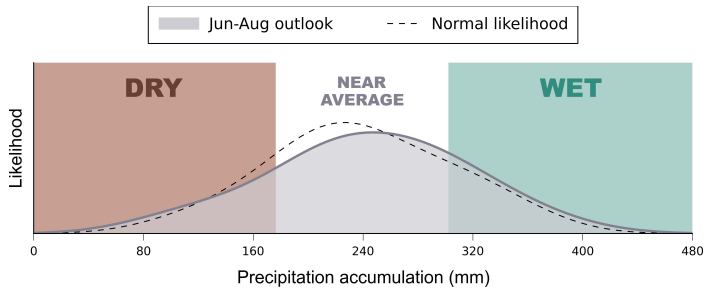
A shift of the solid curve to the left of the dashed curve indicates an increase in the chance of below-average temperature or precipitation. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



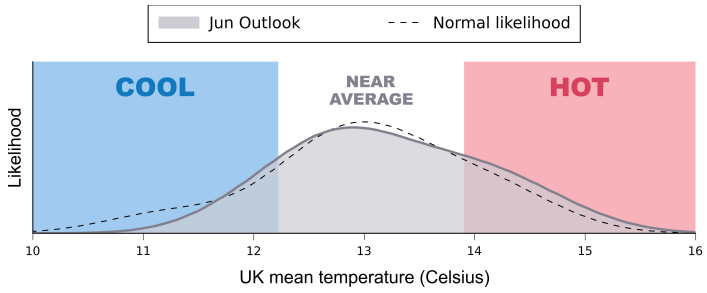
Likelihood leans towards hot conditions

3-month precipitation Outlook compared to normal



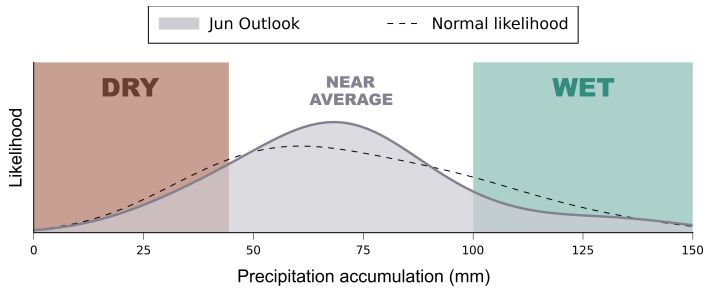
Likelihoods of wet and dry are relatively similar to normal

1-month temperature Outlook compared to normal



Likelihood leans moderately towards hot conditions

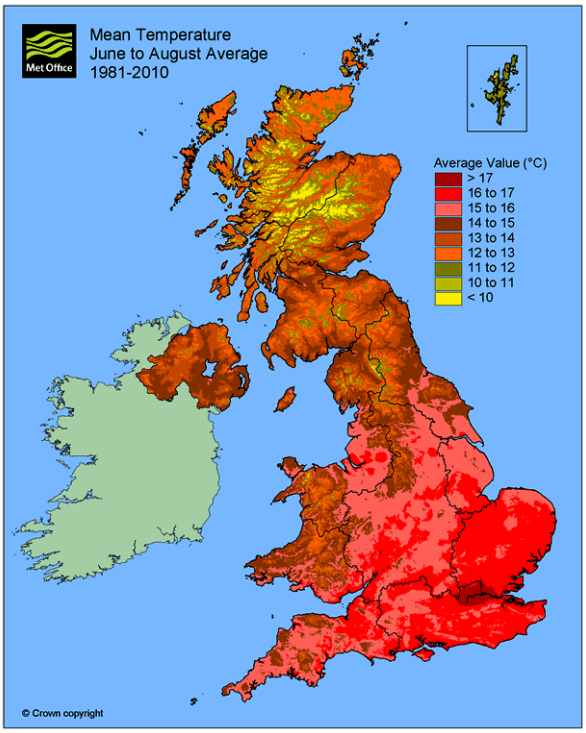
1-month precipitation Outlook compared to normal



Likelihoods of wet and dry are relatively similar to normal

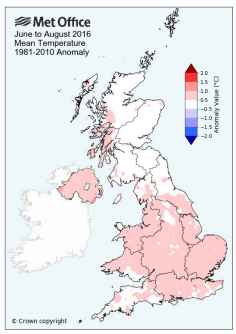
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK for the 3-month Outlook period. Long-term average temperatures for the 1-month period are on page 6. Long-term precipitation averages are shown on pages 7 (3-month) and 8 (1-month).

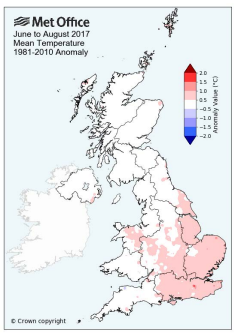


Average temperatures for June - August based on observations from past years.

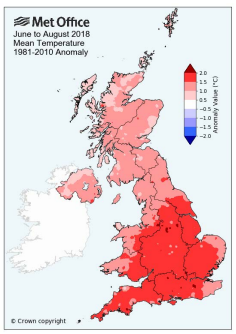
Last 5 years' temperatures, difference from average (3-month)



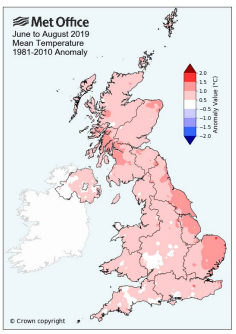
Jun-Aug 2016



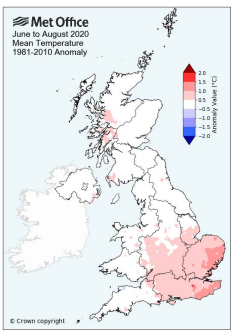
Jun-Aug 2017



Jun-Aug 2018



Jun-Aug 2019



Jun-Aug 2020

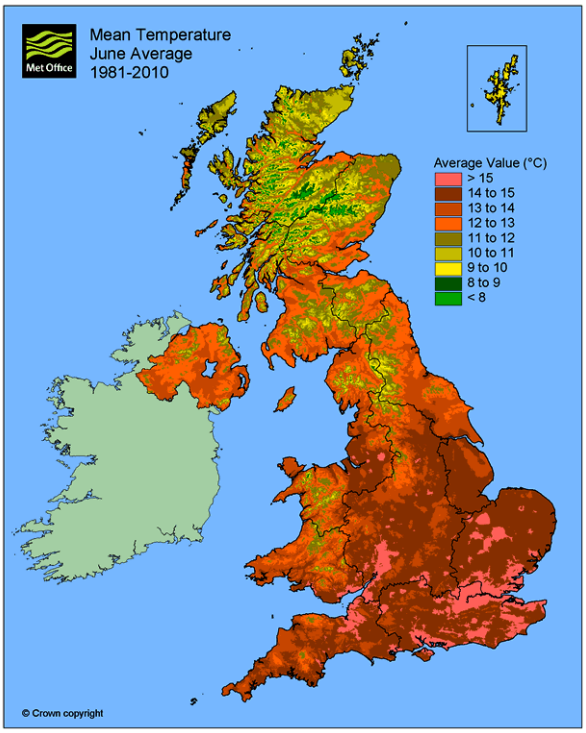
Anomaly (ºC)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to -0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> 2.0

These maps show how June - August temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

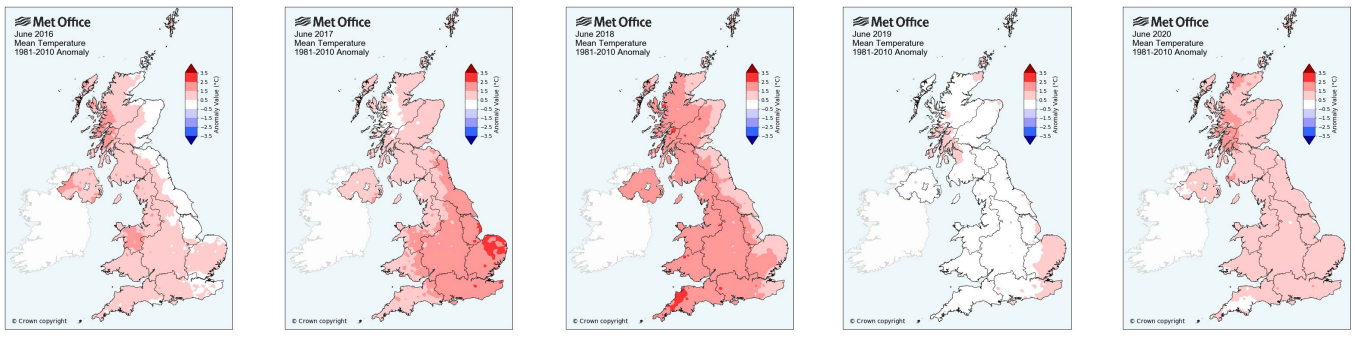
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK for the 1-month Outlook period.



Average temperatures for June based on observations from past years.

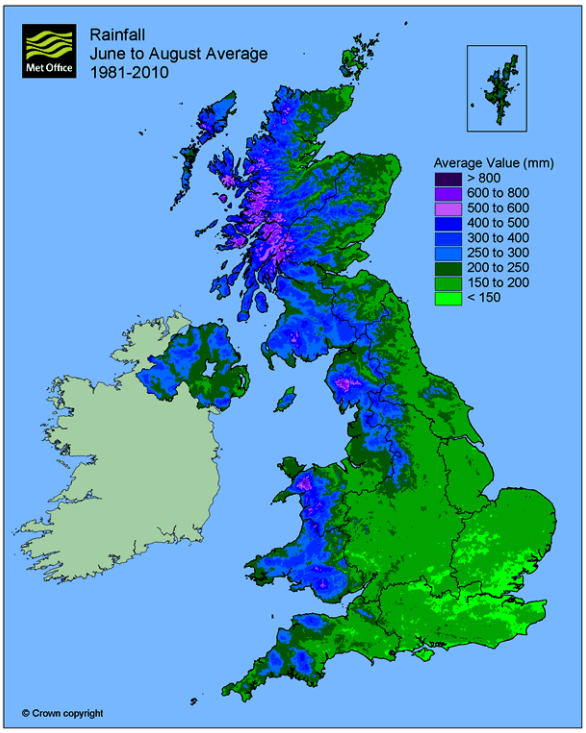
Last 5 years' temperatures, difference from average (1-month)



These maps show how June temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

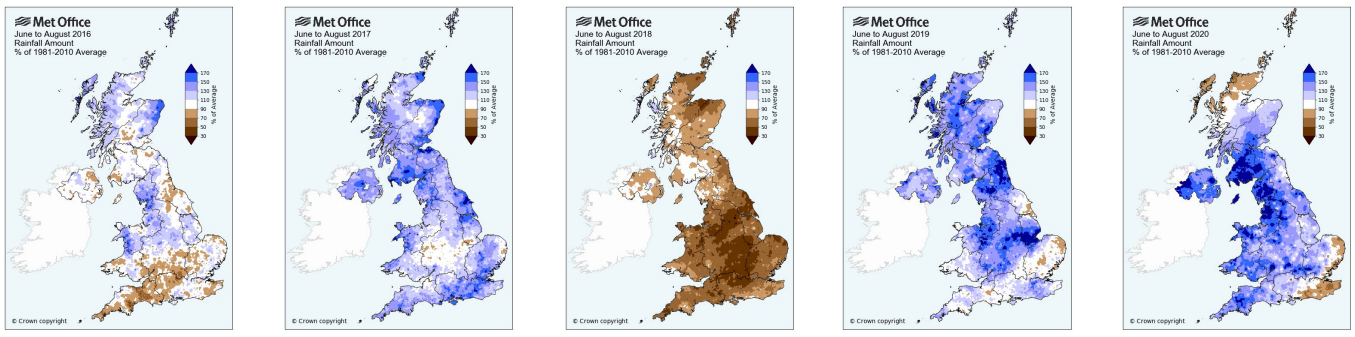
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK for the 3-month Outlook period.



Average precipitation for June - August based on observations from past years.

Last 5 years' precipitation, difference from average (3-month)



Jun-Aug 2016 | Jun-Aug 2017 | Jun-Aug 2018 | Jun-Aug 2019 | Jun-Aug 2020

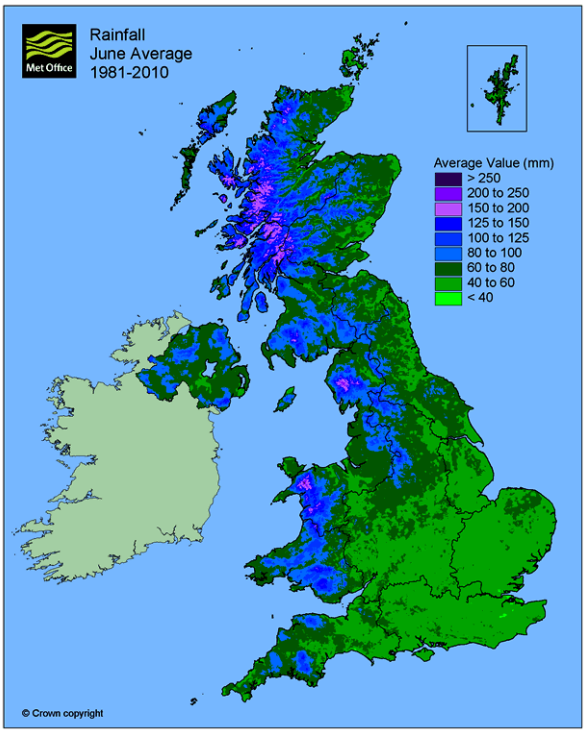
% of average

< 30 | 30 to 50 | 50 to 70 | 70 to 90 | 90 to 110 | 110 to 130 | 130 to 150 | 150 to 170 | > 170

These maps show how June - August precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

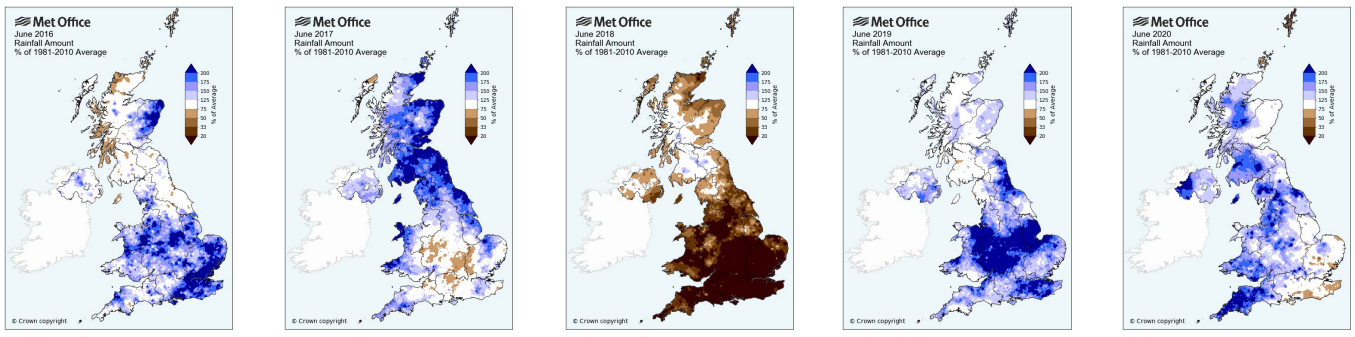
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK for the 1-month Outlook period.



Average precipitation for June based on observations from past years.

Last 5 years' precipitation, difference from average (1-month)



These maps show how June precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&A

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Does an increased chance of a hot summer mean we're in for 3 months of fine weather?
A. An outlook for a slightly increased chance of a hot summer season does not imply prolonged fine weather. For one, the Outlook also shows a substantial chance of a near average summer. Even in a hot summer, temperatures over the season could be due to a mix of hot and cooler spells, warm nights, or consistent, but less extreme, warmth. Note that hot summers can still be cloudy and wet.

Q. Does the increased chance of hot conditions mean we could have a heatwave?
A. The Outlook indicates hot conditions are only slightly more likely than normal for June and for summer. This increase means heatwaves are more likely but perhaps not as likely as in the last few summers, in which heatwaves have been relatively common.

Q. With an increased chance of hot weather will there be an increased risk of thunderstorms?
A. Thunderstorms are not unusual in the UK in summer and although the chances of wet conditions only differ slightly from normal, the increased chance of hot conditions brings an increased risk of thunderstorms and impacts from heavy rainfall. Despite this increased chance, outcomes with fewer thunderstorms remain possible.

About the Outlook

The Outlook presented here is for the United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website (https://www.metoffice.gov.uk).

Information for June will be superseded by the long-range information on the public weather forecast web page, starting from 28 May 2021.

In this product, temperature refers to the average of daytime maxima and night-time minima. All numerical values relate to averages (temperature) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1981-2010.